**WHAT IS CLAIMED IS**

1. A color imaging device comprising:

an imager to generate an image with color decomposition, the imager producing raw image data as a result of generating the image;

a raw image data decomposing unit to decompose the raw image data into a plurality of color planes such that each color plane includes data of pixels of the same color in the form of sub-color image data; and

data compressing unit to compress the sub-color image data for each of the plurality of color planes.

2. A color imaging device as claimed in claim 1, wherein the data compressing unit conducts a reversible data compression for each of the plurality of color planes.

3. A color imaging device as claimed in claim 1, wherein the data compression unit applies a reversible data compression to a specific color plane that provides a relatively large influence on the resolution of a reproduced image and a non-reversible data compression to the other color planes that provide less influence to the resolution of the reproduced image.

4. A color imaging device as claimed in claim 1, wherein the data compression unit applies a non-reversible compression to all of the plurality of color planes.

5. A color imaging device as claimed in claim 4, further comprising a controller to control a compression ratio for a specific color plane that provides a larger effect on the resolution of the reproduced image, independently to the compression ratio for other color

planes having a smaller effect on the resolution of the reproduced image.

6. A color imaging device as claimed in claim 5, wherein the controller sets, in the case a user of the color imaging device attaches importance to resolution of reproduced images, the compression ratio of the specific color plane to be smaller than a standard compression ratio.

7. A color imaging device as claimed in claim 7, wherein the controller sets, in the case a user of the color imaging device attaches importance to resolution of reproduced images, the compression ratio of the specific color plane to be smaller than a standard compression ratio and further the compression ratio of the other color planes to be larger than the standard compression ratio.

8. A color imaging device as claimed in claim 5, wherein the controller sets, in the case a user of the color imaging device attaches importance to color reproducibility of reproduced images, the compression ratio of the specific color plane to be smaller than a standard compression ratio.

9. A color imaging device as claimed in claim 5, wherein the controller sets, in the case a user of the color imaging device attaches importance to color reproducibility of reproduced images, the compression ratio of the specific color plane to be smaller than a standard compression ratio and further the compression ratio of other color planes to be larger than the standard compression ratio.

10. A color imaging device as claimed in claim 4, further comprising a controller to

control a compression ratio of each of the color planes independently.

11. A color imaging device as claimed in claim 10, further comprising an information acquiring unit to acquire information for determining the compression ratio for each of the color planes, wherein the controller determines the compression ratio of each of the color planes based on the information acquired by the information acquiring unit.

12. A color imaging device as claimed in claim 11, wherein the information acquiring unit acquires information about the proportion of high frequency components for each color, and wherein the controller sets the compression ratio of the color plane in which the proportion of the high-frequency component is smallest to be higher than a standard compression ratio.

13. A color imaging device as claimed in claim 11, wherein the information acquiring unit acquires evaluation of white-balance, and wherein the controller determines whether the proportion of the color component is large or small based on the evaluation, the controller further setting the compression ratio of the color plane of which white-balance is determined to be small, to be larger than a standard compression ratio.

14. A color imaging device as claimed in claim 10, wherein the controller sets the compression ratio for each color plane based on an instruction of a user of the color imaging device.

15. A color imaging device as claimed in claim 1, wherein the compression unit compresses data of each color plane according to a compression encoding algorithm in

compliance with JPEG 2000.

16. An image processing method, comprising:

obtaining raw image data of an object by generating a picture of the object with an imager that generates an image of the object with color decomposition;

decomposing the raw image data into a plurality of color planes, each of the color planes comprising pixel information of a color pertinent to the color plane; and

compressing data of each color plane.

17. A method as claimed in claim 16, wherein compressing the color plane is conducted by a reversible compression process for all of the color planes.

18. A method as claimed in claim 16, wherein compressing the color plane is conducted such that only a specific color plane that provides a large influence on a reproduced image of the object is subjected to a reversible compression process while the remaining color planes are subjected to an irreversible compression process.

19. A method as claimed in claim 16, wherein compressing the color plane is conducted with an irreversible process for all of the color planes.

20. A method as claimed in claim 19, wherein a compression ratio for a specific color plane having a large influence on the resolution of a reproduced image of the object is set independently to a compression ratio for other color planes having a smaller influence on the resolution of the reproduced image.

21. A method as claimed in claim 19, further comprising setting a compression ratio for all of the color planes independently.

22. A method as claimed in claim 21 further comprising acquiring information for determining the compression ratio for each of the color planes from the raw data, and wherein the compression ratio is determined by the acquired information.

23. A method as claimed in claim 16, wherein compressing the color plane is conducted according to a compression encoding algorithm in compliance with JPEG 2000.

24. A processor-readable medium storing program code for causing a computer to conduct image processing by:

decomposing raw image data of an object obtained by generating the object by an imager that generates an image of the object with color decomposition, into a plurality of color planes, each of the color planes comprising pixel information of a color pertinent to the color plane; and

compressing data of each color plane.

25. A processor-readable medium as claimed in claim 24, wherein compressing data of each color plane comprises compressing the data with a reversible compression process for all of the plurality of color planes.

26. A processor-readable medium as claimed in claim 24, wherein compressing data of each color plane comprises compressing the data such that only a specific color plane which provides a large influence on a reproduced image of the object is subjected to a

reversible compression process while the remaining color planes are subjected to an irreversible compression process.

27. A processor-readable medium as claimed in claim 24, wherein compressing data of each color plane comprises compressing the data with an irreversible process for all of the color planes.

28. A processor-readable medium as claimed in claim 27, wherein compressing data of each of the color planes comprises setting a compression ratio for a specific color plane that provides a large influence on the resolution of a reproduced image of the object independently to a compression ratio for other color planes in which the influence on the resolution of the reproduced image is smaller.

29. A processor-readable medium as claimed in claim 27, wherein compressing data of each of the color planes further comprises determining the compression ratio for each of the color planes independently.

30. A processor-readable medium as claimed in claim 29 wherein compressing data of each of the color planes further comprises acquiring information for determining the compression ratio for each of the color planes from the raw data, and wherein the compression ratio is determined by the acquired information.

31. A processor-readable medium as claimed in claim 24, wherein compressing data of each color plane comprises compressing the data according to a compression encoding algorithm in compliance with JPEG 2000.

32. A computer-implemented method of image processing comprising:

obtaining raw image data of an object by generating a picture of the object with an imager that generates an image of the object with color decomposition;

decomposing the raw image data into a plurality of color planes, each of the color planes comprising pixel information of a color pertinent to the color plane; and

compressing data of each color plane.

33. A method as claimed in claim 32, wherein compressing the color plane is conducted by a reversible compression process for all of the color planes.

34. A computer-implemented method as claimed in claim 32, wherein compressing the color plane is conducted such that only a specific color plane that provides a large influence on a reproduced image of the object is subjected to a reversible compression process while the remaining color planes are subjected to an irreversible compression process.

35. A computer-implemented method as claimed in claim 32, wherein compressing the color plane is conducted with an irreversible process for all of the color planes.

36. A computer-implemented method as claimed in claim 32, further comprising setting a compression ratio for a specific color plane that provides a large influence on the resolution of a reproduced image of the object independently to a compression ratio for other color planes in which the influence on the resolution of the reproduced image is smaller.

37. A computer-implemented method as claimed in claim 36, further comprising

setting a compression ratio for each of the color planes independently.

38. A computer-implemented method as claimed in claim 37 further comprising acquiring information for determining the compression ratio for each of the color planes from the raw data, and wherein the compression ratio is determined by the acquired information.

39. A computer-implemented method as claimed in claim 32, wherein compressing data for each color plane is conducted according to a compression encoding algorithm in compliance with JPEG 2000.

40. A computer specially configured by executing program code stored on a computer-usable media for causing a computer to conduct image processing by:

decomposing raw image data of an object obtained by generating the object by an imager that generates an image of the object with color decomposition, into a plurality of color planes, each of the color planes comprising pixel information of a color pertinent to the color plane; and

compressing data of each color plane.

41. A computer as claimed in claim 40, wherein compressing data of each color plane conducting compression with a reversible compression process for all of the plurality of color planes.

42. A computer as claimed in claim 40, wherein compressing data of each color plane conducting compression such that only a specific color plane that provides a large influence on a reproduced image of the object is subjected to a reversible compression process while

the remaining color planes are subjected to an irreversible compression process.

43. A computer as claimed in claim 40, wherein compressing data of each color plane conducting compression step an irreversible process for all of the color planes.

44. A computer as claimed in claim 43, wherein compressing data for each color plane comprises setting a compression ratio for a specific color plane that provides a large influence on the resolution of a reproduced image of the object independently to a compression ratio for other color planes in which the influence on the resolution of the reproduced image is smaller.

45. A computer as claimed in claim 43, wherein compressing data for each color plane further comprises determining the compression ratio for each of the color planes independently.

46. A computer as claimed in claim 43 wherein compressing data for each color plane further comprises acquiring information for determining the compression ratio for each of the color planes from the raw data, and wherein the compression ratio is determined by the acquired information.

47. A computer as claimed in claim 40, wherein compressing data of each color plane conducting compression according to a compression encoding algorithm in compliance with JPEG 2000.